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Borough of Brighton.

ANNUAL REPORT

ON THE

HEALTH,

SANITARY CONDITION, &c.,

OF THE

BOROUGH OF BRIGHTON,

FOR THE YEAR 1896.

BY

ARTHUR NEWSHOLME, M.D.,

Medical Officer of Health.

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1897.

BOROUGH OF BRIGHTON.

Sanitary Committee.

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Chief Inspector of Nuisances.

JAMES SKINNER (Certif. San. Institute).

Medical Officer of Health.

ARTHUR NEWSHOLME, M.D. Lond.

PREFACE.

TOWN HALL,

April 13th, 1897.

To the Sanitary Committee of the Brighton Town Council.

GENTLEMEN,—

I beg to present herewith my annual report for the year 1896. It presents the usual statistics in somewhat fuller detail than heretofore, as they have a permanent value for purposes of reference.

I beg leave to draw attention to several points in the report. Firstly, the annual death-rate reached the lowest point hitherto secured, having been equalled in only one former year (1889), before the disturbing effect of Influenza came into operation.

Secondly, I have ventured to discuss several debatable subjects, which are not usually given in these reports. I refer to the remarks on “Alcoholism” and “Syphilis,” which together cause a much higher mortality than all the infectious diseases, to which sanitary efforts are supposed to be chiefly applicable.

The question of “the purchase of insanitary houses” is a most important one, and one on which it is extremely desirable that the Town Council should formulate a definite policy. I have therefore ventured to make some remarks upon it on page 35.

During the year with which this report deals I was unfortunately incapacitated from work for nearly four months owing to illness, and I wish to take this opportunity of expressing my grateful appreciation of the kindness of the Town Council under these special circumstances. I may, I hope, also allude to the devoted and conscientious work done in my absence by Mr. Skinner, the Chief Sanitary Inspector, and by the Assistant Sanitary Inspectors, and to the even more anxious and thoroughly efficient work of Miss Ratcliff, the Matron of the Sanatorium.

I am, Gentlemen,

Your obedient Servant,

ARTHUR NEWSHOLME,

Medical Officer of Health.

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A.—VITAL STATISTICS.

POPULATION.

The population of the Municipal Borough of Brighton at the middle of 1896 is estimated by the Registrar-General to be 120,499. This estimate is based on the assumption that the rate of increase during the decennium 1881-90, is being continued in the present decennium. It will be remembered that a corresponding assumption for the last decennium made our estimated population in 1891 to be 125,539, instead of 115,606, the actual number. There are reasons for thinking, however, that our present population is under-estimated :—

(a) In table I, page 6, an analysis has been made from the Borough Rate books of the houses in each ward. Allowing 5·93 persons for each house (the average number per house at the last census), the 19,877 houses inhabited during the whole of the half year ending June 30th, 1896, contained 117,871 inhabitants. There were, in addition, 83 large institutions, for which the average number must be many more than 5·93 persons per house. If, they be reckoned as containing only this number, and the 795 houses occupied during part of the half year be assumed to contain the same average number of persons, the total population of the Borough was 124,077 at the middle of last year.

(b) During last year, 397 new dwelling-houses were passed by the Borough Surveyor's Department, as compared with 332 in the previous year. These were situate in the following wards :—Preston 174, Preston Park 49, Lewes Road 43, St. Peter's 5, Hanover 1, Queen's Park 48, Pier 13, Kemp Town 8, St. John's 56. If we assume that each of these is occupied by 5·93 persons, and that the other houses in the Borough retain the same average number, the population should have increased 2,354 over the estimated number for last year (119,606), and be now 121,960. The Registrar-General's estimate of 120,499 is taken in the calculation of all the following rates.

Population of Wards.—The figures given in Table I. have been obtained by assuming that there are 5·93 persons in each inhabited house in the Borough, and adding an estimated number for the public institutions in various wards. There must be a margin of error in such estimates, but for most of the wards the figures are approximately trustworthy.

TABLE I.

A	B	C	D	E	F	G	H	I	J
WARD.	Number of Houses occupied during	Part of Half-year ending June 30th, 1896	Number of Unoccupied Houses during Half-year ending June 30th, 1896.	Number of Large Establishments * (not included in Cols. B and C.)	Total number of Dwelling Houses (not including E).	Number of Licensed Houses, not including Refreshment Bars at places of Amusement. (These are also reckoned as Private Dwelling-houses in Col. B.)	Number of Elementary Day Schools.	Number of Churches, Chapels and Mission Halls.	Estimated Population of each Ward.
Pavilion	1,005	16	15	18	1,036	57	1	10	6,167
Regency	1,378	49	7	5	1,434	47	8	5	8,292
West	860	28	27	8	915	19	2	6	5,275
St. Nicholas	1,820	58	13	9	1,891	79	3	12	11,053
Montpelier	1,000	41	44	8	1,085	30	1	3	6,065
St. Peter's	1,432	42	6	—	1,480	54	5	7	8,492
Preston	1,480	107	89	4	1,676	7	3	3	9,659
Park	1,117	59	43	1	1,219	9	3	4	6,649
Lewes Road	1,876	81	9	—	1,966	14	3	4	11,125
Hanover	1,823	86	2	1	1,911	24	5	5	10,910
St. John's	2,082	79	17	—	2,178	50	5	8	12,346
Pier	1,835	54	22	5	1,911	70	3	8	10,982
Queen's Park	1,030	49	24	6	1,103	31	4	5	6,358
Kemp Town	1,139	46	44	18	1,229	17	2	5	7,126
	19,877	795	362	83	21,034	508	48	85	120,499

* Including Hotels, Boarding Schools, Orphanages, Hospitals, Barracks, Workhouse.

NOTE.—The total population of the Borough, 120,499, corresponds with the estimate of the Registrar-General. It has been obtained by calculating 5·93 persons for each house inhabited during the whole of the half-year, this being the number per inhabited house at the Census of 1891, and by adding to this the estimated number of inhabitants in large establishments (Col. E.) which has been estimated from our local knowledge.

BIRTHS.

The total number of births registered in the Municipal Borough in the 53 weeks ending December, 1896, was 3,025,—1,550 of boys and 1,475 of girls. This is equivalent to a birth-rate of 25·1 per 1,000 inhabitants. The birth-rate of the thirty-three great towns was 30·7 per 1,000, that of London being 30·2. Brighton had the lowest birth-rate among the great towns, with the exception of Halifax (24·3). For a comparison of the birth-rate with that of previous years see Table II.

Of the births, 193 were of illegitimate children, forming 6·4 per cent. of the total births, as compared with 6·7 per cent. in the previous year. 69 births occurred in the Workhouse, of which 59 were of illegitimate children.

TABLE II.—*Comparison of Births and Deaths in Successive Years.*

Years.	Births.	Birth-Rate per 1,000 inhabitants.	Deaths from all Causes.	Death-Rate per 1,000 inhabitants.	Death-Rate from the seven chief Infectious Diseases per 1,000 inhabitants.	Death-Rate under one year of age per 1,000 births.
1882	3284	30·2	2372	21·8	4·40	187
1883	3236	29·6	2131	19·5	2·50	160
1884	3248	29·1	2064	18·8	1·77	162
1885	2981	26·9	1952	17·6	1·43	132
1886	2957	26·5	1986	17·8	1·97	160
1887	3038	27·0	1988	17·7	2·33	148
1888	2791	24·6	1928	17·0	1·42	149
1889	2964	26·0	1833	16·1	1·60	131
1890	2915	25·4	2232	19·1	2·57	164
1891	3031	26·2	2097	18·2	1·06	137
1892	2958	25·1	2232	18·9	2·09	151
1893	2981	25·3	2165	18·4	1·84	169
1894	3055	25·8	1943	16·4	1·20	137
1895	3057	25·6	2250	18·8	1·72	104
*1896	3025	25·1	1975	16·1	1·66	124

*53 weeks.

DEATHS.

During the year 1896, 1,975 deaths were registered as belonging to Brighton, 1,022 of males and 953 of females. This shows an annual death-rate of 16·1 per 1,000 inhabitants, as compared with 18·8 in 1895, 16·4 in 1894, and 21·8 in 1882 (see Table II.).

The death-rate was 16·6 in the first quarter of the year, 14·1 in the second quarter, 16·4 in the third quarter, and 17·3 in the fourth quarter of the year.

The death-rate for 1896 was the lowest hitherto experienced in Brighton. In Table III. are given the death-rates for each of the registration sub-districts, the lowest being that of Preston and the highest St Peter's.

TABLE III.

Borough and Sub-Districts.	Population estimated to the middle of 1896.				Annual Rate per 1,000 of the Estimated Population.		
		Births	Deaths.	Deaths from 7 chief Zymotic Diseases.	Birth-rate.	Death-rate.	Death-rate from the 7 chief Zymotic Diseases.
SUB-DISTRICTS—							
Palace ...	20,149	285	307	11	14·2	15·3	0·55
Kemp Town...	15,127	264	261	36	17·5	17·3	2·37
St. Peter's ...	69,006	2116	1239	138	30·7	18·0	1·99
Preston ...	16,217	360	168	15	22·3	10·5	·93
Entire Borough...	120,499	3025	1975	200	25·1	16·3	1·66

TABLE IV.

Ward.	Estimated Population.	Number of Deaths during 1896 from									
		All Causes.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Measles.	Whooping Cough.	Diarrhoea.	Phthisis.	Other Tubercular Diseases.	Bronchitis and Pneumonia.
Kemp Town ...	7,126	81	—	—	3	2	2	3	3	2	17
Queen's Park ...	6,358	141 (3)	—	3	—	10	4	10	7	7	20 (1)
Pier ...	10,982	255	—	1	3	20	1	14	22	9	34
Pavilion ...	6,167	92 (1)	—	2	—	—	1	1	9	5	10
Regency ...	8,292	105	—	1	1	2	1	—	9	3	12
West ...	5,275	92	—	—	—	—	1	—	5	1	10
Montpelier ...	6,065	71 (8)	—	—	—	—	—	2	9	1 (4)	12 (1)
St. Nicholas ...	11,053	178	—	2	2	—	1	3	20	11	25
St. John's ...	12,346	204	1	1	—	10	4	9	19	10	31
Hanover.....	10,910	203	1	2	—	5	6	8	19	7	35
Lewes Road ...	11,125	175	1	2	1	3	5	5	20	9	20
St. Peter's...	8,492	165	3	3	1	2	3	13	13	6	17
Preston Park ...	6,649	58	—	1	2	—	3	1	6 (1)	1	8
Preston ...	9,659	109 (4)	—	2	1	1	—	4	15	5	14
	120,499	1929 (46)	6	20	14	55	32	73	176 (1)	77 (4)	265 (2)

(Deaths in Public Institutions, &c., the home address of which was not given, are given in brackets, and not used in calculating the death-rates).

TABLE V.—*Death Rates per 1000 of Population from various causes in each Ward.*

	From All Causes.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Measles.	Whooping Cough.	Diarrhœa.	Phthisis.	Other Tubercular Diseases.	Bronchitis and Pneumonia.	Estimated No. of Inhabitants per Acre.
Kemp Town ..	11·4	—	—	0·42	0·28	0·28	0·42	0·42	0·28	2·39	15
Queen's Park ...	22·1	—	0·47	—	0·58	0·63	1·58	1·10	1·10	3·15	33
Pier ...	23·2	—	0·09	0·27	1·82	0·09	1·28	2·00	0·82	3·10	134
Pavilion ...	14·9	—	0·33	—	—	0·16	0·16	1·46	0·81	1·62	89
Regency ...	12·7	—	0·12	0·12	0·24	0·12	—	1·09	0·36	1·45	106
West ...	17·5	—	—	—	—	0·19	—	0·95	0·19	1·90	72
Montpelier ...	11·7	—	—	—	—	—	0·33	1·49	0·16	1·98	58
St. Nicholas ...	16·1	—	0·18	0·18	—	0·09	0·27	1·81	0·99	2·26	160
St. John's... ..	16·6	0·08	0·08	—	0·81	0·33	0·73	1·55	0·82	2·53	162
Hanover ...	18·7	0·09	0·18	—	0·46	0·55	0·73	1·75	0·64	3·22	149
Lewes Road ...	15·8	0·09	0·18	0·09	0·27	0·45	0·45	1·80	0·81	1·81	40
St. Peter's... ..	19·4	0·35	0·35	0·12	0·23	0·35	1·53	1·53	0·71	2·00	177
Preston Park ...	8·7	—	0·15	0·30	—	0·45	0·15	0·90	0·15	1·20	16
Preston ...	11·3	—	0·21	0·10	0·10	—	0·41	1·55	0·52	1·45	19
Entire Borough including undis-tributed deaths...	16·1	0·05	0·16	0·11	0·45	0·26	0·61	1·50	0·66	1·97	48

DEATHS DISTRIBUTED ACCORDING TO WARDS.

In Table V., an attempt has been made to calculate the density of population and the death-rate for each of the 14 wards of the Borough. The estimates of population have been obtained as described on page 5. They may be regarded as approximately correct. In drawing conclusions from this Table, it must be remembered that these wards have populations with a very varying proportion of young children and of aged persons. As the death-rate is at its maximum at the two extremes of age, some allowance must be made for this fact. As a rule, the wards in Table V. shewing the lowest death-rate have the smallest proportion of infants. Allowance for this factor would probably not in any case raise the stated death-rate by 2 per 1000; and after making such due allowance, the contrast between a death-rate of 10·7 (*i.e.*, 8·7+2) for Preston Park and 13·4 (*i.e.*, 11·4+2·0) for Kemp Town, with 23·2 in the Pier and 22·1 per 1000 in the Queen's Park Wards, is very striking.

I have extracted for each ward the number of deaths from the more important and preventible causes of death.

The results are shewn in Tables IV. and V.

In the following list I have given for each disease the three wards in which the death-rate was the highest, beginning with the ward having the most unfavourable position.

DISEASE.				THREE WARDS WITH THE HIGHEST DEATH-RATE.	
Diphtheria	...	...	...	{	Queen's Park. St. Peter's. Pavilion.
Measles	...	...	...	{	Pier. Queen's Park. St. John's.
Whooping Cough	...	...	...	{	Queen's Park. Hanover. Lewes Road and Preston Park.
Diarrhœa	...	...	...	{	Queen's Park. St. Peter's. Pier.
Phthisis (Consumption)	...	...	...	{	Pier. St. Nicholas. Lewes Road.
Other Tubercular Diseases	...	...	...	{	Queen's Park. Pier. St. John's.
Bronchitis and Pneumonia	...	...	...	{	Hanover. Queen's Park. Pier.

A glance at the above statement shews that as regards the above seven diseases or groups of diseases, Queen's Park Ward occupies a position among the three wards having the highest death-rate in 6 out of 7, Pier Ward in 5 out of 7, and none of the others in more than 2 out of 7.

THE CAUSES OF THE HIGH DEATH-RATES IN CERTAIN WARDS.

This is a convenient opportunity for discussing the causes of the high death-rates in certain wards of the town. They may be classified under three heads: (a) unfavourable age and sex distribution of the population (an excess of children under 5, or an excess of old people); (b) evil personal and social habits of the population; and (c) bad conditions of housing. The first of these is a purely mechanical cause of a high death-rate, and it can only account for a very small proportion of the high death-rate shewn to exist in certain wards (Table V., page 9).

The second and third of these are so closely interlocked that it is difficult to separate them or to apportion to each its proper share in the unfavourable result. Bad housing is undoubtedly responsible for a large amount of mischief, and it is not without significance that the highest death-rates from consumption and other chest diseases are in the Queen's Park and the Pier Wards, where there is the largest proportion of dilapidated and aged houses approaching the end of the normal "life" of a dwelling-house, and houses which furthermore have the smallest air-space about them. Further remarks on this question will be found on page 35. Bad housing has a side to it for which tenants are largely responsible, that in which dirtiness and overcrowding are concerned. Overcrowding is produced by excessive rents, but also in part by the fact that the parents too often spend at the public-house what ought to be spent on rent, and are consequently obliged to be contented with two or three rooms instead of an entire house. It is hoped that the Bye-laws for Houses let in Lodgings, now under consideration, will do much to remedy the evils for which tenants are chiefly responsible. When this is done, there will still remain houses in many of the older parts of Brighton which require more drastic remedies.

The following statement of the number of houses and of inhabitants in each ward to every single licensed premises is of interest, as bearing on the temptations to which the poor are subjected to spend their small earnings in alcoholic drinks, instead of on home necessities. After making due allowance for the fact that more licensed premises must always be expected in central and business parts (as in the Pavilion Ward) than in more remote and residential parts of a town (like Preston and Lewes Road), the legitimate requirements of St. Nicholas Ward can hardly demand one public house to every 23 houses, of Pier Ward one for every 26 houses, of Queen's Park Ward one for every 33 houses, while Preston is satisfied with only one for every 211 houses.

TABLE VI.

Ward.	One Licensed Premises in the Ward.*	
	Per 18 Houses.	Per 108 Inhabitants.
Pavilion	Per 18 Houses.	Per 108 Inhabitants.
St. Nicholas	" 23 "	" 140 "
Pier	" 26 "	" 157 "
St. Peter's	" 27 "	" 157 "
Regeney	" 29 "	" 176 "
Queen's Park	" 33 "	" 205 "
Montpelier	" 33 "	" 202 "
St. John's	" 42 "	" 247 "
West	" 51 "	" 278 "
Kemp Town	" 67 "	" 419 "
Hanover	" 76 "	" 455 "
Preston Park	" 124 "	" 739 "
Lewes Road	" 134 "	" 795 "
Preston	" 211 "	" 1380 "

* Not including refreshment bars at places of amusement.

Apart from the direct mortality caused by Alcoholism (see page 28), it causes much more indirectly through neglect and partial starvation of children, through overcrowding necessitated by the spending of wages on drink which should have been applied to rent, and in various other ways. On the other hand insufficient house-room tends to drive the husband to the public house, and the evil results of alcoholism and of overcrowding act and react in a vicious circle, to break which the combined and persistent efforts of the Town Council, the School Board, the Board of Guardians, the Churches, and all well-wishers of the Town will be required.

DEATH OF VISITORS.

Of the total 2,016 deaths registered in Brighton during last year, 67 occurring in private houses, 40 in the County Hospital, and one in the Convalescent Home, Marine Parade, were stated to be of visitors. The return of deaths among visitors is incomplete, many of the deaths occurring amongst visitors not being marked as such. The County Hospital in particular draws a considerable number of patients from surrounding districts, as will be seen from the following table of deaths in that institution:—

	1891.	1892.	1893.	1894.	1895.	1896.
Deaths of Inhabitants of Brighton	95 ...	75 ...	94 ...	94 ...	92 ...	96
Deaths of persons from the rural districts of Sussex, &c. ...	18 ...	23 ...	19 ...	21 ...	24 ...	25
Deaths of persons from Hove ...	10 ...	4 ..	6 ...	12 ...	11 ...	11
Deaths of persons from London, &c.	3 ...	2 ...	2 ...	2 ..	3 ...	4
Addresses not known	— ...	— ...	— ...	4 ...	1 ...	—
Total Deaths in the Sussex	—	—	—	—	—	—
County Hospital	126	104	121	133	131	136
	—	—	—	—	—	—

Thus, taking the average of six years, 27 per cent. of the total deaths in the County Hospital were of non-residents.

Of the 29 deaths in the Children's Hospital during 1896, two were of patients from Hove, one from Rye, one from Shoreham, one from Portslade, one from Burgess Hill, and one from London.

The Registrar-General now excludes from the Brighton returns the deaths occurring in the Female Convalescent Home, Marine Parade, in the Sussex County Hospital, and in the Borough Sanatorium respectively, of persons who had not resided in the Borough prior to their admission into the respective institutions; and includes on the other hand the deaths of any Preston paupers which occur in the Steyning Union Workhouse. As shewn by the above table, 40 deaths of outsiders occurred at the County Hospital. One death occurred in the Convalescent Home, Marine Parade. The result of the correction carried

to this extent is to reduce the total 2,016 deaths by 41. No correction is made for the Children's Hospital and other institutions in the town; and no account is taken of the much larger number of visitors who die in Brighton, but not in any public institution in it.

DEATHS IN PUBLIC INSTITUTIONS.

Of the total deaths, 234 occurred in the Workhouse, 136 in the County Hospital, 29 in the Children's Hospital, 18 in the Sanatorium, 3 in the Lying-in Hospital, 1 in St. Mary's Home, 1 in the Barracks, 2 in Shoreham Workhouse, and one in Crescent House.

DEATHS DISTRIBUTED ACCORDING TO AGE.

Death Rate at Various Ages.—An accurate statement of the death-rate involves its statement in groups of ages for the persons living and dying at these ages. This is given for two years in the following table :—

TABLE VII.—*Death-rate per 1000 living at each group of ages.*

Year	At all ages	Under 5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75 and upwards
1895	18.8	63.6	3.3	2.6	2.7	4.0	5.1	10.4	17.5	33.6	59.4	154.7
1896	16.1	51.2	3.7	1.3	3.3	3.9	5.3	11.8	16.3	25.2	52.0	137.0

Infantile Mortality.—The infantile mortality (under one year of age) is best stated in terms of the infantile population, that is, practically the annual number of births. Thus stated, during last year it was 124 per 1,000 births, being highest in the Palace and St. Peter's sub-districts (see Table VII., page 15).

Mortality among Illegitimate Infants.—The total number of deaths under one year of age in 1896 was 410. Of this number 45 were illegitimate children. Stated in proportion to numbers living, the relative mortality among legitimate and illegitimate infants was as follows :—

	1891.	1892.	1893.	1894.	1895.	1896.						
Deaths of legitimate infants per 1,000												
legitimate births...	...	118	...	134	...	158	...	135	...	151	...	129
Deaths of illegitimate infants per 1,000												
illegitimate births	...	293	...	360	...	319	...	173	...	358	...	233

TABLE VIII.—*Infantile Mortality in each Sub-District of Brighton.*

	Death-rate per 1,000 Infants.						
	1890	1891	1892	1893	1894	1895	1896
Palace	120	122	140	155	115	129	131
Kemp Town	199	150	125	193	154	123	126
St. Peter's	185	146	165	174	145	189	139
Preston	100	89	91	114	96	93	78
Borough of Brighton ...	164	137	151	169	137	164	124

CHIEF CAUSES OF DEATH.

The chief causes of death, and the number of deaths from each disease or group of diseases, are tabulated in Table XIII. This table not only gives the relative incidence of different diseases, but also enables us to see the incidence of each disease in the two sexes and at different ages.

ZYMOTIC DISEASES.

The seven chief infectious diseases caused 200 deaths as compared with 206 in the previous year, which is equivalent to an annual death-rate of 1·66 per 1,000 of population.

The relative proportion borne by each zymotic disease is shewn in Table X., page 17.

It is satisfactory to note the continued absence of Small-pox from this table, the very low death-rate from Scarlet Fever, and the diminished amount of Diarrhœa and of Enteric Fever. A glance at Table X. will shew that Diphtheria is declining, in favourable contrast with many parts of England.

THE NOTIFICATION OF INFECTIOUS DISEASES.

For a knowledge of the more important Infectious Diseases we are, since March 1st, 1891, no longer dependent solely on the uncertain and late information obtainable from the death-returns and from casual sources.

The more accurate and prompt returns furnished to me under the Infectious Diseases (Notification) Act show that the total number of *cases* of Infectious Diseases notified during 1896 was 629 :—Diphtheria, 164 ; Scarlet Fever, 247 ; Enteric Fever, 122 ; Erysipelas, 73 ; Puerperal Fever, 11 ; Membranous Croup, 6 ; Small-pox, 6.

The above is the number of supposed *cases* of infectious disease. Further observation in a certain proportion of these led to a revision of the diagnosis.

Twenty-three cases of Diphtheria, 22 of Enteric Fever, 6 of Erysipelas, 2 of Scarlet Fever, one of Puerperal Fever, and one of membranous Croup, were

notified severally by two doctors, one case of Diphtheria was notified by three Doctors, chiefly in connection with their removal to hospitals.

The total number of notifications (including 13 notified by myself,) was 686 as compared with 619 in 1895. Of these, 177 occurred in public medical practice—the amount payable for the certificates being £8 17s.; while 496 occurred in private medical practice—the amount payable being £62. The total amount paid for notification certificates was £70 17s.

The cost of administering the Infectious Diseases (Notification) Act in each complete year since its adoption in Brighton is as follows :—

YEAR.	COST OF NOTIFICATION FEES PAID TO MEDICAL PRACTITIONERS PER 1,000 OF POPULATION.								
								s.	d.
1892	...	...	...	...	...	...	...	11	3
1893	...	...	...	...	...	...	...	17	3
1894	...	...	...	...	...	...	...	10	0
1895	...	...	...	...	...	...	...	10	1
1896	...	...	...	...	...	...	...	11	9

TABLE IX.

				Number of infectious cases per 100,000 of population.	Number of deaths per 100,000 of population.	Case-mortality Number of deaths per 100 cases notified.
Diphtheria and Croup	...	{	1892	94	19.5	20.2
			1893	157	30.0	18.4
			1894	104	21.9	21.1
			1895	171	15.2	8.8
			1896	141	16.4	10.9
Scarlet Fever	...	{	1892	321	6.8	2.1
			1893	406	9.3	2.2
			1894	185	3.3	1.6
			1895	163	4.2	2.5
			1896	206	4.8	2.3
Enteric and Continued Fever	...	{	1892	54	6.8	12.7
			1893	65	12.7	19.5
			1894	69	9.3	13.0
			1895	72	11.7	16.6
			1896	101	11.4	11.2
Erysipelas	...	{	1892	81	6	7.4
			1893	145	12	8.3
			1894	82	5	6.0
			1895	57	3	5.3
			1896	61	4.2	6.9
Puerperal Fever...	...	{	1892	4	5	125*
			1893	10	5	50
			1894	4	—	—
			1895	6	3	50
			1896	9	4.1	46

*Notification of cases evidently incomplete.

TABLE X.

Year.	Population.	Annual Death-Rate per 100,000 of population from										
		All Causes.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever (chiefly Enteric).	Diarrhœa.	The Seven Chief Zymotic Diseases.	Phthisis.	Other Tubercular Diseases.
1869	87,659	2060	—	2·3	79·0	12·5	45·0	39·0	147·0	324·8	—	—
1870	88,878	2390	45·0	44·0	150·0	32·0	83·0	40·0	111·0	505·0	—	—
1871	90,345	2260	71·0	23·0	91·0	9·0	9·0	38·0	155·0	396·0	—	—
1872	91,684	2090	4·4	45·0	83·0	9·9	26·0	27·0	143·0	338·3	—	—
1873	93,041	1870	—	7·5	6·5	4·31	45·1	33·2	91·3	187·9	—	—
1874	95,297	2130	1·1	65·1	4·2	20·0	54·6	33·6	77·7	256·3	—	—
*1875	97,005	2250	—	2·1	20·6	8·2	88·6	25·7	104·0	249·2	—	—
1876	98,746	2000	1·0	56·7	67·9	9·2	13·2	14·2	76·1	238·3	—	—
1877	100,510	1910	9·9	2·0	26·8	5·0	52·5	17·9	80·2	194·3	233	—
1878	102,320	2160	—	21·6	7·9	3·9	80·4	15·7	107·0	236·5	225	—
1879	104,150	1930	—	25·1	13·5	2·9	52·1	9·7	42·4	145·7	214	—
1880	106,200	2000	—	21·7	77·5	2·8	40·6	20·8	127·0	290·4	192	—
1881	107,934	1910	8·4	21·3	67·6	6·5	29·7	41·7	48·2	263·4	183	—
1882	108,680	2180	3·7	143·0	83·5	7·4	115·0	24·8	60·6	438·0	209	—
1883	109,423	1960	—	51·4	11·1	5·6	56·9	24·8	96·4	246·2	192	—
1884	110,180	1870	0·9	7·2	27·1	14·5	33·4	14·5	80·2	177·8	195	—
1885	110,938	1760	0·9	30·6	6·3	16·2	40·6	16·2	32·4	142·2	191	—
1886	111,704	1780	—	9·8	12·5	18·8	60·0	11·6	84·1	196·8	195	—
1887	112,473	1770	—	64·0	8·9	26·7	27·6	11·6	94·7	232·8	178	—
1888	113,248	1700	—	2·7	7·9	21·2	43·2	13·2	53·8	142·0	153	65
1889	114,029	1610	—	40·3	15·8	8·8	23·7	15·8	56·1	160·5	178	67
1890	114,814	1910	—	53·1	10·4	12·2	88·7	11·3	81·8	257·5	192	86
1891	115,606	1820	—	24·2	0·9	10·4	18·2	11·2	40·6	105·5	143	81
1892	116,424	1890	—	99·3	6·8	19·5	18·7	6·8	57·7	208·8	141	79
1893	117,833	1840	—	11·0	9·3	30·0	46·7	12·7	73·8	183·5	168	88
1894	118,715	1640	—	30·3	3·3	21·9	11·9	9·3	43·8	120·5	152	87
1895	119,606	1880	—	20·7	4·2	15·2	34·3	11·7	86·1	172·2	167	74
1896	120,499	1610	—	44·9	4·8	16·4	26·1	11·4	61·1	164·7	150	66

* Preston added to the Borough in 1874.

SMALL POX.

During 1896, six notifications of Small-pox were received. One was subsequently found to be chicken-pox, and another had no ailment. He was quarantined at the Sanatorium, owing to his association with a previous case of small-pox.

The four undoubted cases represent four distinct importations of the disease, and I have once more the satisfaction to record that as the result of prompt recognition of the cases by the certifying practitioners, and the measures that were then taken, no secondary cases arose.

(1) A man, aged 30 years, tramped from Southampton to Brighton. He arrived at the Workhouse Casual Ward March 15th. On the 17th he went to the Church Army Shelter. He began to be ill with Small-pox on 28th March. On the 31st he was admitted to the Workhouse Infirmary, and his disease being

there recognised, he was at once transferred to the Sanatorium. Allowing 12 days (the usual time for incubation), the disease had been acquired at some place between Southampton and Brighton. The three men who slept in the same room at the Church Army Shelter were vaccinated and kept in quarantine; all others who had been possibly exposed to infection were re-vaccinated.

(2) A man aged 40 years came to Brighton on March 24th from a house in a town on the south coast where Small-pox was then present. He began to be ill April 1st, was admitted to the Workhouse April 4th, and transferred at once to the Sanatorium.

(3) A woman, aged 35, who, like the last patient, was a rag-picker, began with Small-pox on 12th June. She was engaged in rag-picking at an establishment in Brighton, to which rags were being at that time consigned from districts in Sussex in which there was considerable Small-pox. The woman had three unvaccinated children, aged 6 and 4 years and 5 months respectively. They were at once vaccinated by me; and I made a house-to-house visitation through the street and vaccinated four children, and re-vaccinated eleven persons living in the same street, and vaccinated seven persons (including two in the above street) working at the same rag-picking establishment.

(4) A man aged 36 years began to be ill with Small-pox on July 11th. He caught his illness in visiting at houses in a district of Sussex in which there were cases of Small-pox. All persons in the same house were re-vaccinated, and special precautions were taken as to dressmaking which was carried on at the house.

In all the above cases, everyone known to have been in possible contact with the patients were kept under frequent supervision for the next three weeks. No secondary cases arose.

ENTERIC OR TYPHOID FEVER.

During 1896, 122 cases were notified as Enteric Fever. Of these 7 were subsequently ascertained not to be Enteric Fever, in three the nature of the disease was doubtful, and in 18 cases the infection was acquired before the patient arrived in Brighton. This leaves 94 cases to be accounted for, as apparently originating in Brighton. In my last annual report I stated that 30·4 per cent. of the total cases of Enteric Fever originating in Brighton were attributed to shell-fish, as compared with 40 per cent. in 1895. During 1896 the cases were similarly investigated, with the result that in 63 cases it appeared that no shell-fish had been taken prior to the attack of fever, in two, there was doubt on this point, in 20 the attack was ascribable to oysters, and in eight to other shell-fish eaten raw. An additional case not coming in the above classification was as follows:—A boy aged 13 years was engaged as an errand boy in a fish shop. An important part of his daily work was the opening of oysters. These oysters, he stated were often coated with mud, and sometimes the mud was offensive. He does not appear to have eaten any

oysters. The ponds from which the oysters in question were derived are seriously contaminated with sewage, and it is not unlikely (in view of what we know of the ways in which enteric fever is acquired by nurses), that this mud clinging to the finger-nails may have been the source of infection.

Of the 63 non-shell fish cases, there was one case each in 40 houses, there were 2 cases each in five houses, there were 6 cases in one house, and seven in another. Of these two were infected from previous shell-fish cases. Thus during 1896, 29·8 per cent. of the total cases originating in Brighton were attributable to shell-fish. The nature of the evidence connecting the origin of these cases with the consumption of shell-fish has been repeatedly explained in previous reports, and the details of each case have been reported to the Sanitary Committee.

SCARLET FEVER.

During 1896, 247 cases of scarlet fever were notified. The proportion of cases and of deaths to population for several years is given in Table IX., page 16. The total number of deaths from scarlet fever in 1896 was 6, as compared with 55 from Measles and 32 from Whooping Cough, over which there is very scant official control.

The exact extent to which the Sanatorium is used for scarlet fever patients can now be gauged for several years.

TABLE XI.

Year.	Admissions to Sanatorium per cent. of total cases notified.	Case-Mortality, per 100 cases.	
		Among Patients treated at Home.	Among Patients treated in the Sanatorium.
1891 (from Mar. 1st.	70·0	—	—
1892	71·7	1·0	2·5
1893	70·6	2·5	1·6
1894	82·2	2·6	1·3
1895	77·4	2·3	2·6
1896	82·6	2·3	2·0*

* Including one death after the patient returned home.

This Table shews that the majority of cases of scarlet fever are treated at the Sanatorium, thus giving a guarantee to both visitors and residents that the chances of infection in the town are reduced to a minimum. It also shews that the present type of scarlet fever is very mild, a fact which is not free from disadvantages as the number requiring treatment would have been considerably smaller but for the fact that previous cases had escaped detection.

DIPHTHERIA.

During 1896, 164 cases of diphtheria were notified. A reference to Table X., page 17, shews that the death-rate from this disease has declined from 30

per 100,000 in 1893 to 16·4 per 100,000 in 1896. Table IX. shews that the death-rate has declined to a much greater extent than the case-rate. This may indicate that diphtheria is less fatally prevalent. Probably, however, mild cases of diphtheria are now more generally recognized than in the earlier days of notification. It is extremely important that the slight cases should not escape detection. The detection of such cases is greatly facilitated by a bacteriological examination of the mucus from the throat in doubtful cases, and I hope that during the current year arrangements may be made to secure this addition to our armamentarium against disease.

MEASLES AND WHOOPING COUGH.

Both measles and whooping cough were more prevalent in 1896 than in the previous year (see Table X., page 17).

These diseases are not notifiable, and we are dependent for our information concerning them on returns kindly made weekly or oftener by the teachers of public elementary schools. Suspicious absentees are visited at their homes, precautionary circulars are distributed, and children from infected households are prevented from attending school. The attempts thus made can only be completely successful when the co-operation of parents has been secured, and it has been realised that these diseases are, in the aggregate, much more fatal than the so-called more serious infectious diseases.

The increase of measles centred around 4 schools. On May 16th, one infants' school was closed by me for three weeks, on July 23rd another infants' school was closed a week before the usual summer holidays, on 30th October an infants' school was closed for three weeks, and a week later the girls' department of the same school was closed; on the 19th November, another infants' school was closed for three weeks.

During 1896, 461 houses in which measles was known to be present were visited. They are classified as follows, in accordance with the number of cases in each house :—

One case occurred in each of 366 houses.					
Two cases	„	„	„	61	„
Three	„	„	„	25	„
Four	„	„	„	5	„
Five	„	„	„	4	„

Thus, 603 cases were known to us and made the subject of inquiries and precautionary measures. This would give a fatality of 9 per 100 cases. The real fatality is probably more nearly 3 per cent., which is higher than that of scarlet fever in Brighton. Assuming that 75 per cent. of certificates of notification are payable at the rate of 2s. 6d. each and 25 per cent. at 1s. each, and that the fatality of measles in Brighton is 3 per cent., the cost of compulsory notification of this disease, if it had been in force during the last year, would have been about £195.

The utility of compulsory notification by the medical practitioner is reduced to its minimum in the case of measles by two facts: 1st, measles is very infectious for three days before the rash appears; and 2nd, doctors are only called in for a small proportion of the total cases. What is required is some modification of the present machinery for notification of such diseases as whooping cough and measles, and along with this its universal enforcement. Only the first case in each house should be notifiable by the practitioner, and the notification by the householder should be strictly enforced, a proviso to come into operation that the onus of proving that he or she was unaware of the infectious character of the sickness shall rest upon the householder.

DIARRHŒA.

The number of deaths from this cause was 3 in the first quarter of the year, 3 in the second quarter, 63 in the third quarter, and 4 in the fourth quarter of the year. This is a considerably lower mortality than in 1895.

The proportion at different ages was as follows:—

Quarter of the year.	Aged in Months.								Aged in Years.		
	Under one month	1-2	2-3	3-4	4-5	5-6	6-9	9-12	1-2	2-3	All older ages.
1st	—	—	—	—	—	1	1	—	—	—	1
2nd	1	—	1	—	—	—	—	—	1	—	—
3rd	3	5	6	5	7	5	11	4	9	1	7
4th	—	1	—	—	1	—	—	—	2	—	—
	4	6	7	5	8	6	12	4	12	1	8

It will be seen that of the 73 total deaths from Diarrhœa, 52 occurred in infants under one year and 64 before the end of the second year of life, most of the remainder being in old people.

The association of the mortality with hot weather is well known. It can be studied in detail in Table XII., where its association with meteorological conditions is shewn for each week of the year.

One of the chief provoking causes of diarrhœa in hot weather is the decomposition of milk in connection with the feeding of infants from bottles. Thus, of the deaths from diarrhœa under 6 months of age, 30 out of 36 were hand-fed and in 3 information could not be obtained, while in only 3 instances were the infants entirely fed from the breast. Of the infants between 6 and 9 months old, 11 out of 12 were hand-fed. It would be a great boon if sterilized whole milk in small bottles, each sufficing for one meal, were available for purchase by mothers, and were to come into general use for infants during the summer months. This plan is now being generally adopted in some countries, and I trust that in Brighton the want will soon be supplied by private enterprise.

TABLE XII.

1896, Week ending	Death-rate per 1,000 per annum.	Number of Deaths during the week from								Temperature of air during week.			Tempera- ture of soil during week at a depth of four feet.		Wind.								Rainfall.		No. of hours of bright sunshine.				
		Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Influenza.	Bronchitis.	Pneumonia, including Broncho-Pneumonia.	Phthisis.	Highest.	Lowest.	Mean.	Highest.	Lowest.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		Calm.	No. of days on which rain fell.	Amount collected in inches.	
Jan. 4...	14.7			1		1			4		52.2	39.0	45.8	46.2	45.4		1	3	2		1	1	2		3	0.38	5.41		
" 11...	16.9		1	1		1			1		45.8	32.8	38.2	46.2	45.8	1	1	3							1		—	4.33	
" 18...	20.3		1	1					5		50.0	34.0	43.8	45.4	45.0	1	1	2							1	6	0.43	8.16	
" 25...	13.0		1	1				3	1		50.4	35.0	42.5	45.2	45.0	1	1	2				2			1	4	0.56	13.42	
Feb. 1...	16.0		1	1	1				1		51.2	31.0	42.0	45.4	45.0	4	—	2			1	2			2	2	0.12	19.75	
" 8...	20.3			1		1		3	4	4	50.2	30.0	40.7	45.0	44.2	—	1	1	1	1	2				—	—	—	12.74	
" 15...	14.7								2	5	51.6	34.8	44.0	45.0	44.2	1	2	1	2	2					2	2	0.05	8.58	
" 22...	22.9					1			6	5	51.0	30.6	42.9	45.2	45.0	2	1	1	2	3					3	3	0.18	23.67	
" 29...	14.3	2		2					4	1	58.0	26.0	38.8	45.2	44.0	1	1	1	3	1	1				1	1	0.03	33.07	
Mar. 7...	20.3				1	1		1	1	7	51.4	36.6	45.1	45.0	44.0	—	1	1	1	1	2				1	6	1.16	14.50	
" 14...	14.7	1	1		1			2	2	5	52.2	38.0	45.9	46.0	45.0	—	—	—	1	1	2				1	6	1.00	10.16	
" 21...	16.0		1					2	4	3	57.0	35.2	47.3	46.8	46.0	—	—	—	—	1	2				1	6	0.56	48.25	
" 28...	11.7		1					2	4	6	63.0	37.8	49.8	48.0	47.0	—	3	2	—	—	1				—	4	0.14	23.50	
April 4...	16.9			1	2		1	1	3	1	60.6	41.8	51.9	48.6	47.4	—	3	1	—	—	2				—	4	0.02	19.75	
" 11...	13.0						1		2	3	60.8	37.4	47.8	49.0	48.8	—	1	1	1	1	2				5	5	0.36	33.08	
" 18...	12.1				2				4	3	60.4	35.0	50.4	50.0	49.0	1	2	1	1	1	2				2	1	—	46.17	
" 25...	13.8		1		2	1			1	1	58.6	35.4	50.1	51.0	50.0	2	1	5	1	1	—				—	1	0.05	43.33	
May 2...	11.3				2				2	3	70.4	36.4	53.2	51.2	51.0	1	1	3	—	—	1				—	—	—	67.59	
" 9...	16.0				2				1	4	75.0	42.0	58.5	53.2	51.2	1	1	1	1	1	1				—	—	—	72.33	
" 16...	11.7			1					2	4	68.4	42.6	54.9	54.2	53.2	2	2	6	—	—	2				4	4	0.32	39.92	
" 23...	12.5								1	5	68.6	45.4	56.9	54.8	54.2	—	—	—	—	—	2				—	—	—	68.74	
" 30...	13.8				1				1	3	71.8	43.0	59.5	56.4	55.0	—	—	—	—	1	2				4	4	0.31	79.17	
June 6...	16.9	2			1	1		1	2	5	78.0	54.4	63.2	57.8	56.8	2	—	—	1	1	1				3	3	1.33	55.58	
" 13...	14.7			1	1				1	3	80.4	50.8	64.0	59.2	58.0	—	1	1	1	1	1				2	2	0.26	75.34	
" 20...	14.3	1							1	1	72.0	46.6	60.0	59.8	59.2	2	—	—	—	—	2				—	1	0.33	63.43	
" 27...	16.0								1	6																2	2		

1896. Week ending	Number of Deaths during the week from										Temperature of air during week.		Temperature of soil during week at a depth of four feet.		Wind.								Rainfall.		No. of hours of bright sunshine.			
	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Influenza.	Bronchitis.	Pneumonia, including Broncho-Pneumonia.	Plithisis.	Mean.		Highest.	Lowest.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	No. of days on which rain fell.		Amount collected in inches.		
July 4...	12.1	1	—	—	—	1	—	1	2	2	62.0	59.8	59.2	2	—	—	—	—	—	1	2	—	—	4	0.16	43.58		
" 11...	13.4	3	—	1	—	2	—	1	2	4	64.2	60.2	59.2	3	—	—	—	—	—	—	—	—	—	—	—	—	65.16	
" 18...	13.4	—	—	1	—	1	—	—	1	2	63.3	61.0	60.4	—	—	—	—	—	2	3	—	—	—	—	—	—	58.17	
" 25...	13.0	2	—	1	—	4	—	—	—	2	64.3	61.2	61.0	—	—	—	—	—	1	2	—	—	—	—	—	—	66.92	
Aug. 1...	18.2	4	—	—	1	2	—	2	—	3	62.7	61.6	61.4	1	—	—	—	—	1	2	—	—	—	—	—	—	61.84	
" 8...	23.4	5	—	—	—	16	—	—	1	4	60.5	61.8	61.0	2	—	—	—	—	1	2	—	—	—	—	—	—	40.26	
" 15...	21.6	4	—	—	—	14	—	—	1	5	63.0	61.2	60.8	1	—	—	—	—	—	2	—	—	—	—	—	—	41.67	
" 22...	21.2	6	—	—	—	8	—	—	2	4	60.8	60.8	60.4	2	—	—	—	—	—	2	—	—	—	—	—	—	52.84	
" 29...	19.0	2	—	—	—	5	1	—	1	5	59.4	60.4	60.2	1	—	—	—	—	—	2	—	—	—	—	—	—	34.58	
Sept. 5...	14.7	2	—	—	—	5	—	2	1	2	61.2	60.0	59.8	—	—	—	—	—	2	2	—	—	—	—	—	—	20.75	
" 12...	15.6	3	—	—	—	3	—	—	—	2	62.0	60.0	59.8	1	—	—	—	—	—	3	—	—	—	—	—	—	17.26	
" 19...	16.0	1	—	—	—	2	—	1	3	2	61.3	60.0	59.8	—	—	—	—	—	—	—	—	—	—	—	—	—	32.07	
" 26...	11.7	—	1	—	—	—	—	—	—	4	56.0	59.8	59.0	—	—	—	—	—	—	1	4	—	—	—	—	—	30.84	
Oct. 3...	10.0	—	—	—	—	—	—	—	—	1	56.0	57.8	57.8	—	—	—	—	—	—	—	1	—	—	—	—	—	35.16	
" 10...	15.6	—	—	—	—	—	—	—	—	5	56.7	57.8	57.2	—	—	—	—	—	—	—	1	—	—	—	—	—	25.41	
" 17...	14.3	1	—	—	—	—	—	—	—	4	49.3	57.2	55.8	4	—	—	—	—	—	—	—	—	—	—	—	—	15.09	
" 24...	14.7	—	—	—	—	—	—	—	—	8	44.6	55.8	53.2	—	—	—	—	—	—	—	—	—	—	—	—	—	32.33	
" 31...	15.6	3	—	—	—	1	—	2	2	3	45.8	52.8	51.2	1	—	—	—	—	—	—	2	—	—	—	—	—	45.24	
Nov. 7...	17.3	1	—	—	—	1	—	1	4	5	43.2	51.0	50.0	1	—	—	—	—	—	—	3	—	—	—	—	—	35.08	
" 14...	14.3	2	—	—	—	1	—	5	1	2	44.4	49.6	48.0	3	—	—	—	—	—	—	1	—	—	—	—	—	22.34	
" 21...	21.6	1	—	—	—	—	—	2	7	8	44.7	48.0	48.0	1	—	—	—	—	—	—	2	—	—	—	—	—	23.67	
" 28...	22.1	2	—	—	—	—	—	8	4	4	40.4	48.0	47.2	—	—	—	—	—	—	—	1	—	—	—	—	—	14.51	
Dec. 5...	21.6	1	—	—	—	—	—	8	4	2	41.6	47.0	45.4	—	—	—	—	—	—	—	—	—	—	—	—	—	16.00	
" 12...	23.4	2	—	—	—	—	—	7	7	5	44.8	46.0	45.4	—	—	—	—	—	—	—	—	—	—	—	—	—	8.16	
" 19...	14.7	1	—	—	—	—	—	5	4	3	36.6	46.2	45.2	3	—	—	—	—	—	—	—	—	—	—	—	—	7.00	
" 26...	12.5	—	—	—	—	—	—	5	2	1	38.3	44.8	43.2	3	—	—	—	—	—	—	—	—	—	—	—	—	9.58	
Jan. 2...	24.7	1	—	2	—	1	—	5	3	4	43.7	44.0	43.2	—	—	—	—	—	—	—	—	—	—	—	—	—	18.00	
Entire year of 53 weeks	16.1	55	6	20	32	14	73	21	135	108	180	80.4	26.0	52.1	61.8	43.2	59	62	18	13	28	55	49	41	46	172	28.24	1780.80

TABLE XIII.

CAUSES OF DEATH IN BRIGHTON DURING THE YEAR 1896.	Total Deaths.	SEX.		AGES AT DEATH.			
		Male.	Female.	0—1	1—5	5—10	10 15
Small Pox	—	—	—	—	—	—	—
Measles	55	28	27	15	37	3	—
Whooping Cough	32	20	12	9	20	3	—
Enteric Fever	14	9	5	—	—	—	1
Diarrhœa	73	33	40	52	13	—	—
Diphtheria	20	11	9	2	11	4	1
Scarlet Fever	6	4	2	1	2	3	—
Puerperal Fever	5	—	5	—	—	—	—
Erysipelas	5	3	2	3	1	—	—
Other Zymotic Diseases	23	15	8	12	—	1	—
Influenza	21	11	10	2	—	—	1
Phthisis	180	121	59	1	2	3	1
Tabes Mesenterica	17	10	7	7	9	—	—
Brain Tubercle	36	24	12	14	14	6	1
Other Tubercular Diseases	27	14	13	3	15	—	—
Cancer Malignant Disease	132	55	77	—	1	2	—
Gout and Rheumatism	23	11	12	—	—	2	—
Other Constitutional Diseases	25	15	10	3	4	1	—
Parasitic Diseases	—	—	—	—	—	—	—
Dietic	13	5	8	—	—	—	—
Nervous Diseases, excluding							
Convulsions	153	76	77	4	7	1	2
Convulsions	35	20	15	33	2	—	—
Diseases of Organs of							
Special Sense	4	2	2	2	1	—	—
Circulatory	175	70	105	—	1	1	3
Respiratory	299	140	159	73	61	4	—
Digestive	106	51	55	10	11	5	1
Generative	11	1	10	—	—	—	—
Urinary	72	50	22	1	2	1	1
Locomotor	3	2	1	—	—	—	1
Integumentary	2	1	1	—	—	1	—
Lymphatic	1	—	1	—	—	—	—
Addison's Disease	3	3	—	—	—	—	—
Premature birth and low							
vitality	61	36	25	61	—	—	—
Congenital defects and mal-							
formations	36	22	14	35	—	1	—
Old age	173	81	92	—	—	—	—
Violence	72	46	26	13	7	4	2
Ill-defined	62	32	30	54	5	—	—
TOTALS	1975	1022	953	410	226	46	15

TABLE XIII. (*contd.*)

AGES AT DEATH.								Not certified	Inquest.	Visitors.
15—20	20—25	25—35	35—45	45—55	55—65	65—75	75 and upwards			
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	2
4	1	4	3	1	—	—	—	—	—	1
—	—	—	1	—	1	2	4	—	1	6
1	—	—	—	—	—	1	—	—	1	—
—	—	—	—	—	—	—	—	—	—	—
—	—	3	2	—	—	—	—	—	—	—
—	—	—	—	1	—	—	—	—	—	—
—	3	3	—	—	3	1	—	—	—	2
1	—	1	—	1	6	3	6	—	—	—
10	19	43	40	44	12	5	—	1	3	6
1	—	—	—	—	—	—	—	—	—	2
—	—	1	—	—	—	—	—	—	—	3
1	—	1	2	3	—	1	1	—	—	1
1	—	—	11	28	31	39	19	1	—	3
3	1	1	3	—	5	5	3	—	—	1
2	2	3	3	—	4	1	2	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	1	5	2	5	—	—	—	—	—
3	—	5	18	23	19	37	34	6	5	4
—	—	—	—	—	—	—	—	8	1	2
—	—	—	—	1	—	—	—	—	—	—
2	2	8	26	24	30	39	39	8	25	11
3	3	5	20	20	38	39	33	—	7	9
1	—	10	12	14	15	16	11	—	1	2
—	1	1	5	1	1	1	1	—	1	1
1	3	2	11	11	12	21	6	1	1	1
1	—	—	—	—	—	—	—	—	—	—
—	1	—	—	—	—	—	—	—	—	—
—	—	—	1	—	—	—	—	—	—	—
1	—	—	1	1	—	—	—	—	—	—
—	—	—	—	—	—	—	—	5	1	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	2	37	134	1	—	3
4	6	9	10	5	7	1	4	1	71	6
—	1	—	—	—	—	2	—	—	—	—
40	44	101	174	180	191	251	297	32	118	67

INFLUENZA.

Influenza is an intensely infectious disease. It is satisfactory to note that during 1896 the number of deaths ascribed to this disease was only 21, being the lowest since 1890, when after many years' absence Influenza again began to bulk largely in the death-rate of England.

The number of deaths directly ascribed to Influenza in Brighton since it first appeared in our midst has been as follows.

Year.	No. of Deaths ascribed to Influenza.					No. of Deaths from Diseases of the Respiratory Organs.
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total for Year.	
1889	—	—	—	—	—	291
1890	18	5	—	—	23	417
1891	37	27	7	—	71	381
1892	143	3	1	2	149	392
1893	8	8	6	11	33	343
1894	35	5	—	9	49	321
1895	82	17	1	7	107	411
1896	11	3	1	6	21	299

Besides the deaths returned as due to Influenza, a considerable number returned as caused by chest ailments have Influenza for their primary cause.

There was, as shown in the above Table, a very satisfactory reduction in the mortality from chest ailments during last year, which is attributable to the favourable climate conditions of the year, as well as to the diminished prevalence of Influenza.

DEATHS FROM TUBERCULAR DISEASES.

A special importance attaches to tubercular diseases, in view of the fact that they are due essentially to the entrance into the system of a special micro-organism, the tubercle-bacillus. The majority of those thus receiving infection are happily able to resist its development. In weaker persons, however, and particularly in those with a family predisposition to the disease, the reception of the infection is followed by the slow development of tuberculosis.

It will be seen from the following figures that some improvement in the mortality from consumption has been secured :—

Mean Annual Death-Rate in Brighton from Phthisis (Consumption) and other Tubercular Diseases per 100,000 Persons in Groups of Years.

	Phthisis.	Other Tubercular Diseases.
Ten years, 1861-70	295	98
Ten years, 1871-80	247	78
Three years, 1881-83	193	?
Three years, 1884-86	169	?
Four years, 1887-90	169	?
Three years, 1891-93	150	81
1894	152	87
1895	167	74
1896	150	66

During 1896 the deaths from Consumption numbered 180. In 150 of these it was found practicable to make inquiries into the history and environment of the deceased. There was clear evidence that in at least 24 out of the 150, or 16 per cent., the illness dated from some time precedent to the time of coming to live in Brighton. In not a few cases death occurred within a few weeks after the patient came to Brighton. Such sending patients to the sea-side in the last stages of disease is to be deprecated from the standpoint both of the patient and the town.

Of the 24 cases in which a definite history was obtainable, three had lived less than 1 month in Brighton at the time of their decease; three between 1 and 3 months; five between 3 and 6 months; seven between 6 and 12 months; one between 1 and 2 years. In the remaining five the symptoms dated from a period previous to settling in Brighton. It will be noted that this statement is necessarily incomplete. In 30 cases no inquiry was practicable, and there is reason to believe that the majority of these were temporary residents in the town.

In every house in which consumptive patients had died the sick-rooms were thoroughly cleansed and disinfected, and thus danger to the next occupants of the rooms avoided.

OTHER PREVENTIBLE DISEASES.

A large number of deaths from other diseases than those previously considered are preventible, and will, with the improvement of the standard of living and the avoidance of evil habits of life, steadily decline. Among these may be named a large share of the mortality from bronchitis and pneumonia, as well as of the three causes of death which will next be considered.

SYPHILIS.

During 1896, the deaths of six male and five female infants under one year of age were returned as due to this cause, also of two men and two women.

The death returns under this head are immensely understated, the prevalent immorality causing a great amount of this disease, which lurks in the system for years and is probably, next to alcoholism, the most fertile cause of ill-health and of death in our midst. Many diseases occurring under other heads, as diseases of the brain and spinal cord, and of various other organs, are really due either to alcoholism or to syphilis, although these are not mentioned in the death certificates. Syphilis (great-pox) is a contagious disease just as much as is small-pox, though it is spread almost solely as the result of immorality. One of its most painful features is the transmission of the disease to the innocent offspring, as in the above eleven fatal cases among infants. It can only be diminished by the active enforcement of all preventive measures against known immorality, and by the treatment and where practicable the segregation, of men and women who have become infected. Such segregation is probably only practicable at present in the case of bodies of men, as in a regiment of soldiers.

ALCOHOLISM.

During 1896, 13 deaths were returned as caused by alcoholism or delirium tremens. Of these, 4 were men and 9 women, and only one was over 60 years of age. The deaths do not represent more than a very minute proportion of the mortality really caused by alcoholism. As a rule, the real cause is concealed behind such headings as disease of the brain or spinal cord, apoplexy, heart disease, liver disease, hæmatemesis (vomiting of blood), cirrhosis of liver, gout, Bright's disease, which, with many other diseases, are caused to a very large extent by chronic alcoholic excess.

23 deaths, 14 of men and 9 of women, were caused by cirrhosis of the liver, a disease which is almost solely produced by intemperance. Alcohol has been described by a well-known physician as the "genius of degeneration." There is no other agent so competent to hurry on the degenerative changes in the system associated with old age; in other words, *alcohol is one of the chief causes of premature old age*. It is not sufficiently recognised that these evil effects are very commonly produced by the systematic indulgence in an amount of alcoholic drinks that would by most be regarded as moderate; and that those who, while never becoming intoxicated, daily take a considerable amount of spirits (especially if taken apart from meals) are much more likely to suffer in health and prematurely break down than the labourer who may get drunk once a fortnight and be a teetotaller in the intervals.

Rheumatic Fever.

During 1896, 9 deaths were caused by this important disease, as compared with 4 in 1895, 9 in 1894, and 6 in 1893. The deaths were chiefly among young adults. They represent but a small share of the mischief caused by this disease. The case mortality is low, but of those who survive, a large proportion go maimed by the heart disease which has supervened on the rheumatism.

Deaths from Violence, &c.

During the year 72 deaths were due to some form of Violence. In 122 cases inquests were held,* the verdicts returned being as follows :—

1.—NATURAL CAUSES 52

2.—SUICIDAL—

Shooting 3

Drowning 3

Hanging 4

Poisoning 3

Cut Throat 2

Falls from Windows 3

— 18

3.—ACCIDENTAL—

Misadventure whilst partially under the
influence of chloroform for surgical
operation 1

Suffocation whilst sleeping with parents ... 12

Injuries received 3

Inattention at Birth 1

Collapse of Wall 1

Suffocated by an escape of gas 2

Thrown from a horse 1

Drowning 6

Burns 7

Scalds 1

Run over 3

Falls 9

Choked 1

— 48

4.—HOMICIDAL 2

5.—OPEN VERDICT—

Found Dead 1

Found Drowned 1

— 2

Total 122

* Including 4 inquests on visitors.

B.—SANITARY WORK OF THE YEAR.

Sanitary Inspections.

In the following tables the work of the Sanitary Department is stated, so far as it can be given in tabular form. It will be seen that 11,039 houses were visited in the course of house-to-house inspection, as compared with 10,567 in the previous year. This, however, does not represent the total number of houses visited during the year. Apart from house-to-house inspection, a large proportion of the time of the inspectors is occupied in attending to complaints received from householders in every part of the town. During last year 1,326 such complaints received attention, as compared with 1787 in the previous year. In addition, 5,266 visits were made by the special inspector for purposes of investigation and disinfection after cases of infectious disease. In each of these cases it is the practice to take the opportunity of making a sanitary examination of the houses visited. 5,266 visits were made during the year to Slaughter-Houses, 49 to Cowsheds, 200 to Bakehouses, 946 to Dairies and Provision Shops. The Common Lodging-houses have received 56 visits. In 204 houses the soil-pipe has been tested by the volatile tests: and 579 drains have been opened for examination. For particulars of the work see the table on the next page.

TABLE XIV.—*Inspections during 1896.*

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals for 1896.	Corres- ponding Total, 1895.
Number of Streets Inspected ...	88	68	68	73	297	364
Number of Houses and other Premises Inspected ...	3182	2412	2789	2656	11039	10567
Number of Complaints attended to ...	304	386	417	219	1326	1787
Number of Visits to Slaughter Houses ...	1413	1349	1240	1264	5266	5587
Number of Visits to Cowsheds ...	17	2	26	4	49	208
„ „ Bakehouses	—	200	—	—	200	185
„ „ Dairies and Provision Shops...	144	243	231	328	946	1397
Number of Day Visits to Common Lodging-Houses ...	2	22	4	8	36	70
Number of Night Visits to ditto	—	12	4	4	20	57
„ Visits in respect of Sickness ...	1082	1544	1582	1456	5664	5548
Number of Visits to Fumigate Rooms ...	116	107	115	190	528	470
Number of Visits for Removal of Bedding ...	147	77	146	123	493	182
Number of Drains tested by Volatile Test ...	86	46	36	36	204	232
Number of Drains Opened for Examination ...	181	108	151	139	579	479
Number of Smoke Observations	9	—	2	—	11	15
„ Visits for Sundry Purposes ...	1269	1160	1133	1398	4960	4777
Number of Visits to look up Notices Served ...	2388	2408	1656	3597	10048	10704
Number of Attendances at Police Court ...	2	7	6	5	20	59
Number of Notices Served for Town Clerk ...	13	—	—	33	46	151
Number of Samples Collected for Analysis ...	16	6	37	22	81	105
Number of Inspections of Stables	497	411	214	409	1531	732
„ Wastes of Water re- ported ...	52	59	58	88	257	436
Number of Letters sent to Schools and Public Library ...	79	140	126	125	470	398
Meteorological Observations taken ...	91	91	127	92	401	365
Visits to Schools ...	353	322	299	234	1208	737
Number of Visits under Factory & Workshops and Shop Hours Act ...	1032	1097	855	1151	4135	3848
Number of Visits for Contagious Diseases Animals Committee...	8	—	—	—	8	176
Drains flushed ...	27	18	23	18	86	33
Circulars delivered <i>re</i> Vaccination	—	20000	—	—	} 33000	—
„ „ <i>re</i> Diarrhœa ...	—	—	13000	—		

The Sanitary Inspections enumerated in Table XIV. have been followed by the serving of the notices given in Tables XV. and XVI. A very large proportion of the work is done on the strength of verbal recommendations or preliminary “warning” notices.

TABLE XV.—*Notices served on Owners during 1896.*

Nature of Notice.	Warning and Verbal Notices.			Final Notices.		Total Number of Notices on owners complied with.
	Number served.	Number complied with before service of final notice.	Number reported for final notice.	Number served.	Number complied with.	
To drain into sewer and fill up cesspools	13	3	10	4	4	7
To relay drain and fill up cesspools	3	2	1	3	3	5
To relay drain	420	321	99	102	102	423
To repair drain and soil pipe ...	274	156	118	128	128	284
To trap drain	418	242	176	206	205	447
To cleanse & whitewash rooms	315	180	135	150	140	320
To clear drain or soil pipe ...	121	19	102	116	116	135
To clear, repair or cleanse closet, or repair flushing apparatus or pan	1025	525	500	562	562	1087
To repave yard or scullery ...	424	244	180	227	222	466
To pave and drain stables ...	13	4	9	11	11	15
To abate other nuisances ...	1284	659	625	578	566	1225
To provide covered dust bins ...	1052	546	506	554	541	1087
To discontinue to let cellar dwellings	2	—	2	2	2	2
To remove drain trap from bakehouse	26	12	14	17	17	29
To cleanse premises and remove foul accumulations	12	7	5	2	2	9
To provide manure receptacles	80	20	60	64	63	83
To fill up underground manure pits	58	26	32	28	28	54
To provide W.C. accommodation	5	3	2	5	4	7
To lay on water to closet ...	57	32	25	41	41	73
To alter water pipes	18	11	7	9	9	20
To cause waste pipes to discharge into outer air	27	18	9	16	14	32
Totals	5647	3030	2617	2825	2780	5810

TABLE XVI.—*Notices served on Occupiers during 1896.*

Nature of Notice.	Warning and Verbal Notices.			Final Notices.		Total number of notices on occupiers complied with.
	Number served.	Number complied with before service of final notice.	Number reported for final notice.	Number served.	Number complied with.	
To fill up underground manure pit... ..	...	...	...	2	2	2
To trap drain	7	5	2	...	...	5
To cleanse and white-wash rooms	19	17	2	3	3	20
To clear drain or soil pipe ...	18	9	9	26	26	35
To clear, repair or cleanse closet, or repair flushing apparatus or pan	363	263	100	125	125	388
To repave yard or scullery ...	4	4	...	...	...	4
To abate other nuisances ...	70	49	21	18	18	67
To discontinue keeping animals so as to be a nuisance	144	88	56	63	63	151
To abate overcrowding	81	46	35	45	44	90
To abate smoke nuisance ...	7	6	1	1	1	7
Cleanse and white-wash bake-houses	73	61	12	18	18	79
Cleanse and white-wash work-rooms	53	44	9	7	7	51
To discontinue to let or occupy cellar dwellings	7	2	5	10	10	12
Cleanse premises and remove all foul accumulations	375	241	134	148	147	388
To lay on water to closet ...	1	1	...	...	...	...
To cause waste pipes to discharge in open air	2	2	...	...	...	...
To provide covered dust-bin ...	2	2	...	...	...	...
Totals	1226	840	386	466	464	1304
Total of notices served on owners	5647	3030	2617	2825	2780	5810
Total notices served	6873	3870	3003	3291	3244	7114

The increased readiness with which notices are complied with has been continued during 1896, as evidenced by Tables XVII. and XVIII.

TABLE XVII.

Date of Annual Report.	Year under Report.	Percentage of notices not complied with at time of issue of Report.
March 23rd, 1889	1888	20 per cent.
February 13th, 1890	1889	14 "
March 31st, 1891	1890	4.3 "
March 16th, 1892	1891	3.2 "
April 21st, 1893	1892	1.3 "
April 13th, 1894	1893	0.8 "
April 15th, 1895	1894	1.3 "
June 20th, 1896	1895	0.0 "
April 12th, 1897	1896	0.4 "

The number of summonses for sanitary defects which it has been found necessary to issue in successive years is given in the following table :—

TABLE XVIII.

Offence.	1889	1890	1891	1892	1893	1894	1895	1896
Failing to abate nuisances	20	16	21	4	4	4	4	4
Failing to lay on water to closets	36	11	13	6	3	—	—	2
Failing to alter water pipes	—	—	—	1	—	—	—	—
Failing to cause waste pipes to discharge in open air	—	1	—	—	—	—	—	—
Totals	56	28	34	11	7	4	4	6

Housing of the Working Classes Act.

Official representations have been made by me under Part II. of the above Act during 1896, that the following premises are in a state so dangerous to health as to be unfit for human habitation :—

Situation of Premises.	No. of Houses.	Legal Proceedings taken.	Result.
Circus Court	12	—	One house put into thorough repair.
Circus Street	3	—	Two houses put into thorough repair.
Edward Street	3	1	Cases in hand.
Holland Street	1	—	House put into repair.
William Street	2	—	Houses being put into repair.
Sun Street... ..	1	—	Case pending.
Carlton Row	7	—	Six houses put into thorough repair and one demolished.
Spa Street	1	—	House closed and dismantled.
Tichborne Street	1	—	Converted into a store.
George Street	1	1	Proceedings still in progress.
Crescent Cottages	3	—	Houses closed.
Paradise Street	10	—	Proceedings pending.
Mount Pleasant	1	—	House closed.

As to the Purchase of Insanitary Houses.

Some comment is required on the action taken under Part II. of the Housing of the Working Classes Act. The procedure devised by this part of the Act is, that when a house has been represented by the Medical Officer of Health as unfit for human habitation, a notice must be served to put it into a habitable condition. No other procedure is given for those houses which cannot by any means be made fit for human habitation, and they, like all others, must receive the above notice before a closing order can be applied for.

In the majority of instances, the houses thus condemned can, by the execution of thorough and complete renovations, be rendered fit for human habitation. There remain, however, a number of houses which urgently require condemnation under Part II. of the above Act, but which, by virtue of the absence or extreme deficiency of air-space, or in consequence of other radical defects, cannot by any practicable means be made fit for human habitation according to present standards. The majority of these *when first erected* were, according to present standards, unfit for habitation. The then local governing body of the town had, in the absence of building bye-laws, apparently no power to prevent the erection of houses in courts and narrow streets which render free access of air and light impossible. The question then comes, whether, in every such instance in which the house in question cannot, in the opinion of the Town Council, be rendered fit for human habitation, the procedure prescribed by the Act should be strictly adhered to, and a closing order be followed by an attempt to secure the demolition of the premises. There is an obvious objection to the money of the town being spent "in buying up houses which have been allowed to get into a state which renders them unfit for human habitation." No such proposal can be entertained when the execution of extensive repairs by the owner will render the house again fit for habitation. There remain, however, cases in which the owner is willing to carry out all repairs that the Council order, but in which the execution of these repairs will still leave the house unfit for human habitation, because it has insufficient air space about it, or none at all. In these instances the money spent upon repairs is, from the point of view of the improvement of the sanitary condition of the inhabitants of such houses, almost entirely thrown away, and it is highly desirable that the Corporation, instead of compelling such houses to be put into repair, should purchase them in cases where the owners are willing to sell at prices adequate to the circumstances, with the object of clearing the site, widening the street, and thus gradually improving the sanitary condition of extremely congested streets and areas. The steady pursuance of this policy in strictly defined and limited cases would, in my opinion, be an almost equally efficient and much more economical method of dealing with certain insanitary areas than a reconstruction scheme on the lines of the Cumberland Place and Little St. James's Street areas. It would, in my opinion, be advantageous to the town to devote a certain annual

sum to the purchase of insanitary houses, *the demolition of which is necessary to secure a sanitary improvement of narrow streets and courts, the purchase to be strictly limited to the case of houses which cannot, by the execution of structural repairs on the part of the owner, be rendered fit for human habitation*; and I strongly recommend this course to the attention of the Council. I may add that this course is already adopted in some towns, and that in one at least advertisements are issued inviting owners of worn-out and insanitary property to offer it for sale to the Corporation.

Common Lodging-Houses.

Another year has passed without any further accommodation being provided for the occupants of the 15 common lodging-houses (accommodating 270 lodgers) who were displaced from the Cumberland Place condemned area. The deficiency of this accommodation is one, though by no means the only cause, which has led to the present overcrowding in single roomed tenements, for which and other allied dwellings, bye-laws are under consideration.

There are now three common lodging-houses in the town, accommodating 53 persons. Of these, only one, accommodating 36 persons, is in a satisfactory condition.

During 1896, there were no breaches of the bye-laws for common lodging-houses.

Water Supply.

105 houses have been reported to the Sanitary Committee during the year as without a proper water supply. Of these, in 99 the notices served have been complied with, and 6 are in hand.

During the year, 257 wastes of water were reported to the Waterworks Department.

Sale of Food and Drugs Act.

Number of samples collected during the year 1896	88
" " adulterated " "	7
" Prosecutions " "	5
" Convictions " "	2
" Withdrawn " "	3
Aggregate Amount of Fines	£2 5 0
Analyst's Fees recovered	0 10 0
	£2 15 0
Cost of Samples	£0 16 2
Cost of Analysis	22 0 0
Inspector's Salary	12 0 0
	34 16 2
Fines and Analyst's Fees recovered	2 15 0
Cost of working the Act over the amount recovered	£32 1 2

The samples collected were :—Butter, 4 ; Lard, 4 ; Cream, 1 ; Milk, 76. Total 88.

All the samples of Butter, Lard and Cream were genuine.

Of the samples of Milk, 4 were adulterated with added water, 3, 3, 8 and 9 per cent. respectively, and 3 were deficient in Butter fat, 5, 18 and 33 per cent.

A fine of 5/- was inflicted in the case of 18 per cent. deficient in Butter fat, and fine of £2 in the case of 33 per cent. deficient in Butter fat.

Meat Seized or Surrendered during the year 1896.

Description.	No. of animals.	No. condemned by Magistrate.	No. destroyed by arrangement with owner.	Total weight in lbs.
A.—At the Abattoir—				
Bullocks (whole carcase) ...	4	—	4	2227
„ (part of carcase)...	11	—	11	172
Sheep (whole carcase) ...	1	—	1	80
„ (part of carcase) ...	14	—	14	47
Pigs (whole carcase) ...	26	—	26	3359
„ (part of carcase) ...	396	—	396	2376
B.—In Private Slaughter-houses and Shops—				
Bullocks (whole carcase) ...	14	—	14	8337
„ (part of carcase)...	27	—	27	680
Sheep (whole carcase) ...	5	—	5	208
„ (part of carcase) ...	2	—	2	6
Pigs (whole carcase) ...	—	—	—	—
„ (part of carcase) ...	—	—	—	—
	500	—	500	17492

Other Foods Seized during 1896.

Description.	Quantity.	Quantity condemned by Magistrate.	Quantity destroyed by arrangement with owner.
Dried Cranberries	1½ bushels	—	1½ bushels
Plums	6½ bushels	—	6½ bushels
Tomatoes	3 bushels	3 bushels	—

The following butchers are at the present time slaughtering at the Public Abattoir :—

BUTCHERS Mr. Aylward, Lewes Road.
 Mr. Bloomfield, Queen's Park Road.
 Mr. Dean, Lewes Road.
 Mr. Divall, Lewes Road.
 Mr. George, Islingword Road.
 Mr. Florence, Western Road, Hove.
 Mr. Hucking, Western Road.
 Messrs. Jones Bros., Sutherland Road and Islingword
 Road.
 The London and Provincial Meat Stores, Church Road,
 Hove.
 The Sussex Farmers' Meat Supply Association, Norfolk
 Square.
 Mr. Sandalls, Lewes Road.
 Mr. Seal, Preston Road.
 Mr. Vigar, Southover Street.
 Mr. Warren, Lewes Road.

PORK BUTCHERS ... Mr. Barton, Islingword Road.
Mr. Combridge, Western Road, Hove.
*Mr. Comber, Upper Lewes Road.
*Mr. Dawes, Upper Lewes Road.
*Mr. Pledge, Park Street.
Messrs. Skinner Bros., Trafalgar Street.

* These three butchers slaughter at the Abattoir for an aggregate of about 40 pork butchers.

THE PUBLIC ABATTOIR.

1896 is the second complete year of working at the Abattoir.

The following statement gives the number of animals slaughtered in the public and private slaughter-houses in connection with the Abattoir :—

Year.	In the Public Slaughter-Houses					In the Private Slaughter-Houses					Total.
	Beasts.	Calves.	Sheep.	Lambs.	Pigs.	Beasts.	Calves.	Sheep.	Lambs.	Pigs.	
1895	89	95	694	113	4182	187	71	1231	329	—	6991
1896	333	253	1549	201	4134	58	69	990	201	3391	11188

The difficulties in connection with unloading cattle at the railway siding of the Abattoir continue, animals having to be driven through the streets to reach the Abattoir. It is essential that this should be remedied to ensure the full natural development of work at the Abattoir.

PRIVATE SLAUGHTER-HOUSES.

There are now 40 private slaughter-houses in use in the Borough, most of them in the more central parts of the town. In the last session of Parliament, the Town Council acquired the power to purchase slaughter-houses by agreement with the owners (sec. 34, Brighton Corporation Act, 1896). Under these powers Slaughter house No. 72, in Hollingdean Place, has been acquired for the sum of £160.

During the year 4 summonses under the Slaughter-house Bye-Laws have been taken against two persons. One was withdrawn on payment of costs, and an aggregate fine of £3 was inflicted in the other three cases.

Factory and Workshops Acts and Shop Hours Act.

During 1826, 3,985 visits have been made ; 1,670 of these being inspections, the remainder being for the purpose of serving Notices and affixing forms and the looking up of Notices served.

400 inspections were of Bakehouses.

52	„	„	Factories.
284	„	„	Workshops employing protected persons.
160	„	„	Adult Male Workshops.
224	„	„	Domestic Workshops and outworkers.
550	„	„	Premises coming under the Shop Hours Act.

A large part of the year has been occupied in measuring up workrooms in accordance with Sec. 1 of the Factory and Workshops Act, 1895. This requires that there shall be 250 feet of cubic space for each person in a workshop during the day, and 400 feet for each person during overtime. The Act also requires that a notice shall be kept exhibited in each room, stating the number of persons who may be employed. These Notices are supplied by us on cards, which can be conveniently hung.

During the year, 462 rooms have been measured and the necessary forms fixed in the workroom. This is nearly one half of the total number of workrooms in the town that required to be measured.

The above Section appears to require the occupiers to measure the workrooms, and the Local Authority to verify the measurement. Some of the occupiers had done this, but in very few instances were their figures even approximately correct. Not much overcrowding has been found, as most of the premises measured have been Laundries which, from the nature of their work, are less likely to be overcrowded than such trades as Dressmakers and Tailors, where they can sit and work comparatively close together.

The following defects have been found in the course of Inspector Mills' inspections during the year. Notices to remedy these defects have been well complied with, at the end of the year only 22 of the most recent being outstanding.

Workshops requiring cleansing or whitewashing...	...	...	60
„ overcrowded	...	...	16
„ without proper ventilation	...	...	5
„ without closet accommodation	...	...	2
„ without separate closet accommodation for sexes ...	...	...	2
„ opening into closet	...	...	1
„ opening into stable	...	...	1
Bakehouses requiring cleansing or whitewashing ...	...	...	74
„ having drains opening inside	...	...	35
„ having closet communicating with	...	...	3
Closets with flushing apparatus defective...	...	...	43
„ defective	...	...	24
Closet pans foul	...	...	57
Closets unventilated	...	...	9
„ without water supply	...	...	13
„ choked	...	...	4
Drinking water drawn from closet cistern	...	...	4
Drains defective	...	...	11
„ ventilators defective	...	...	4
„ choked	...	...	5
„ untrapped	...	...	34
„ traps choked and foul	...	...	7
Soil pipes defective	...	...	5
Stables undrained	...	...	4
Manure pits defective	...	...	4
Paving of yards or laundries defective	...	...	30
Without proper dust bin	...	...	22
Waste pipes defective	...	...	10
Animals kept in dirty condition	...	...	6
Sinks leaky	...	...	5
Yards dirty	...	...	10
Foul accumulations on premises	...	...	16
Roof and rain water pipes defective	...	...	7
Houses without proper water supply	...	...	2
Urinals foul and defective	...	...	8
Painters' workshop without washing conveniences ...	...	...	1
Cellar dwelling	...	...	1

During the year H.M. Inspector of Factories has made complaint to me in respect of sanitary defects in four workshops and one factory. These have

all been attended to, and reports made in accordance with the Act to H.M. Inspector. Mr. Pearson, the new Inspector for this district, and Inspector Mills have also from time to time exchanged lists of Factories and Workshops inspected during the year, this being very useful in preventing overlapping.

No complaints have been made during the year in relation to the Shop Hours Act, and since the Amendment Act of last year there has been no difficulty in getting the notices exhibited.

C.—BOROUGH SANATORIUM.

At the time of writing, the portion of the new Sanatorium for which Messrs. Peters & Son's contract for £19,775 was accepted by the Town Council in September last, is being erected. It comprises a new administrative building, one scarlet fever block, a block containing six small wards for patients requiring special isolation and for paying patients, a porter's lodge, and a discharge building. The Town Council is under certain other obligations to the Local Government Board : (a) to remove the large corrugated building within the next five years ; and (b) to provide a small-pox hospital on an entirely separate site. The latter has not hitherto been secured.

The following table gives a summary as to patients treated in the Borough Sanatorium during 1896 :—

TABLE XIX.—*Number of Patients during 1896.*

DISEASE.	Remaining in the Hospital on Dec. 31st, 1895.	Admitted during 1896.	Total number treated during 1896.	Number discharged during 1896.	Number who have died in the Hospital during 1896.	Remaining under treat- ment on Dec. 31st, 1896.
Scarlet Fever...	21	204	225	183	4	38
Enteric Fever...	3	40	43	34	5	4
Measles ...	—	10	10	9	1	—
Diphtheria ...	2	77	79	70	6	3
Small Pox ...	—	4	4	4	—	—
Other Diseases	1	8	9	7	2	—
Quarantine ...	—	6	6	6	—	—
Diarrhœa ...	—	1	1	1	—	—
TOTALS ...	27	350	377	314	18	45

A comparison of the above figures in the next table, with the corresponding figures in previous years, shews that the Sanatorium, which has always been freely used for Scarlet Fever, is now being used in a much higher proportion of cases for Diphtheria and Typhoid Fever.

TABLE XX.

DISEASE.	1881 (four months)	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
Scarlet Fever ...	23	88	56	157	73	102	147	106	297	162	114	276	352	227	151	204
Diphtheria ...	...	1	...	2	3	3	11	10	5	5	12	43	33	54	90	59
Convalescent Department ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
Typhoid Fever ...	20	5	27	17	12	12	16	48	61	5	4	26	14	11	11	40
Measles ...	...	2	9	3	2	4	11	6	83	9	16	1	4	1	15	10
Rötheln (German Measles) ...	...	1	1	...	...	...	...	...	...	...	...	...	1	1	...	..
Small Pox ...	21	16	...	2	1	5	...	...	1	...	...	...	9	3	5	4
Erysipelas ...	...	1	...	...	...	...	...	...	...	...	...	...	2	...	1	2
Whooping Cough ...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	1
Diarrhœa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Chicken Pox ...	...	...	...	...	1	...	...	1	...	...	...	...	1	1	1	...
Other Diseases ...	...	...	...	...	...	...	...	1	...	3	6	6	3	4	3	5
Quarantine ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	6
TOTALS ...	64	114	98	181	92	126	185	172	447	184	152	352	419	302	284	350

The number of nurses during the year varied from 7 to 11, and of servants from 11 to 13 including porters. The greatest number of patients at any time was 66, the smallest number 18.

NATURE OF CASES AND RESULTS OF TREATMENT.—Of the total 350 patients admitted during 1896, 204 were suffering from scarlet fever, 77 from diphtheria, 40 from enteric fever, 10 from measles and 4 from small pox. Of the 5 under the heading “other diseases,” three were admitted as doubtful small pox, of whom one had chicken pox, one was suffering from erythema, and one from eczema. One patient admitted as typhoid fever was suffering from advanced Bright’s disease, and another admitted as typhoid was well on admission.

The results of treatment for several years are shown in the following table :—

TABLE XXI.

DISEASE.	Mortality per 100 cases of each Disease under treatment.						
	1890	1891	1892	1893	1894	1895	1896
Scarlet Fever	3·6 204	3·3 148	2·8 284	2·5 415	1·2 279	2·7 103	2·1 109
Enteric Fever	28·5 10	0 5	14·8 28	18·2 14	14·3 17	20·0 12	12·7 39
Diphtheria	60·0 5	8·8 12	14·3 44	3·3 33	17·6 50	7·6 96	7·8 71
Measles	0 9	0 16	0 1	0 4	0 1	0 15	10·0 10
Small Pox	—	—	—	0 9	0 3	0 5	0 4

NOTE.—The small figures show the total number under treatment for each disease. It is important to have regard to them, as percentages based on small numbers are relatively less trustworthy.

* The case mortality (fatality) is calculated by dividing the deaths multiplied by 100, by half the sum of the admissions, discharges and deaths for the year.

The following table gives the number of patients for whom payment was claimed, the amount claimed in each case, and the amount already paid :—

TABLE XXII.

By whom Payable.	Number of Patients.	Amount Payable.	Amount already paid.
Brighton Board of Guardians... ..	14	£ s. d. 35 3 11	£ s. d. 35 3 11
Private Patients	20	105 18 2	102 2 4
Disinfection, and hire of van for Patients not removed to Sanatorium		13 8 7	12 14 7
		154 10 8	150 0 10

In 1895 the amount payable for patients was £243 8s. 6d., in 1894 it was £277 5s. 9½d., in 1893 it was £303 17s. 0½d., in 1892 it was £260 18s. 7d., and in 1891 it was £181 11s. 2½d. At the end of 1891 it was decided to abolish all payments for patients in the general wards, except for parochial patients, for whom the Board of Guardians pay 7s. 6d. per week for children under 10, and 15s. for others.

The items in the following statement have been furnished by Mr. Stevens, the Borough Accountant :—

TABLE XXIII.—*Expenditure at Sanatorium.*

	1889.		1890.		1891.		1892.		1893.		1894.		1895.		1896.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Salaries and Wages—																
Medical Officer	150	0 0	150	0 0	150	0 0	150	0 0	150	0 0	150	0 0	150	0 0	177	6 0
Matron and Steward	160	17 3	134	16 4	59	19 3	64	11 6	59	19 3	59	19 3	76	17 6	79	19 0
Nurses, Porters and Servants	601	3 7	339	12 6	326	18 9	422	12 10	435	9 2	421	6 8	416	14 7	431	7 2
Groceries, Provisions, &c.	1322	9 11	674	6 10	616	14 11	886	5 5	1092	17 6	821	10 4	713	6 10	730	13 9
Medical Sundries and Disinfectants	138	6 4	25	4 9	14	9 5	52	11 1	52	2 4	42	10 10	36	19 4	42	0 11
Drupery Goods (including Uniforms)	238	17 3	37	15 11	43	3 6	70	2 6	48	8 4	67	15 6	59	14 7	84	19 4
Gas, Coal, Coke, &c.	424	14 1	242	3 3	228	15 1	300	8 9	339	14 4	323	19 5	401	8 3	254	15 7
Rates and Taxes (including Water Rate)	35	5 0	35	6 4	35	5 0	37	5 0	37	5 0	38	10 0	41	1 8	44	1 8
Fire and Boiler Insurance	16	11 6	16	11 6	18	13 2	17	11 6	17	11 6	17	11 6	17	11 6	17	11 6
Printing, Stationery and Advertising	37	13 10	27	19 11	15	3 11	15	16 3	12	9 7	15	1 1	14	5 10	11	18 9
Hose, Hydrants and Fitting	—		—		41	0 0	—		—		—		—		—	
Repairs, &c.	115	15 6	138	4 1	100	6 1	140	17 0	70	10 0	59	1 11	16	14 0	9	7 0
Miscellaneous...	113	3 1	44	8 8	51	0 4	85	11 2	126	2 4	127	9 3	94	14 10	77	5 7
Fees to Surgeons	2	2 0	2	2 0	8	8 0	6	6 0	2	2 0	—		15	2 9	10	10 0
Hire of Institution Nurses...	—		20	0 0	3	4 6	—		37	1 1	15	7 6	8	15 9	45	2 6
Gardener, Garden, Sundries and Manure	—		—		—		40	14 10	44	10 10	94	18 0	112	1 1	123	11 5
Total Expenditure in the Year	3356	19 4	1888	12 1	1713	1 11	2290	13 10	2526	3 3	2255	1 3	2175	8 6	2140	10 2
No. of Patients in the Year	447		152		184		352		419		302		284		350	
Total No. of Weeks spent by above Patients in the Sanatorium	2439		1170		1095		2164		3031		2119		1517		1887	
Total Cost per week for each Patient, including all the Working Expenses	s. d. 27 6		s. d. 34 6		s. d. 29 3		s. d. 21 2		s. d. 16 8		s. d. 21 3		s. d. 28 8		s. d. 22 8	

No deduction is made in the preceding statement for amounts received each year for paying patients. It will be noted that the average weekly cost, including the proportional share of all current expenses of the year, was 22s 8d. in 1896, 28s. 8d. in 1895, 21s. 3d. in 1894, 16s. 8d. in 1893, 21s. 2d. in 1892, and 34s. 6d. in 1890.

Other things being equal, the larger the number of patients suffering from a given disease are under treatment, the less is the cost per head. The administrative reasons for this are fairly obvious; but I may mention the fact that where single cases of an infectious disease are under treatment, it occasionally, though rarely, happens that the number of nurses is double that of patients, while the same staff would suffice for a dozen patients; and the expenses of firing, &c., are identical in the two instances.

The following is a statement of the disinfecting work carried out during 1896:—

	278	Mattresses	
	206	Palliasses	
	176	Beds	
	515	Pillows and Bolsters	
	499	Blankets	
	309	Sheets and Counterpanes	
	44	Entire Contents of Rooms (not classified)	
	306	Dresses and Coats	
	1,595	Other Articles of Wearing Apparel	
	235	Carpets	
	1,144	Other Articles	
	52	Boxes, &c., of Wearing Apparel (Articles not classified), and a large number of minor articles	
Number of Journeys with Ambulance to Sanatorium	...		336
„ „ Hospitals	...		47
„ Van to Sanatorium with Infected Articles			294
„ Van from Sanatorium to return Disinfected Articles	...		269
			946

